

*REMARKS*

Claims 26-28, 42, 43, and 50 have been amended to remove the recitation of the G5349A (E1784K) mutation. Claims 27 and 37 have been amended to recite that the probe is specifically hybridizable to mutated *SCN5A* DNA and not to wild-type *SCN5A* DNA. Claim 34 has been amended to recite that the method for assessing a risk in a human subject for long QT syndrome comprises screening the subject for a mutation in *SCN5A* selected from D1114N, L1501V, delF1617, R1623L, and S1787N.

It is submitted that these amendments do not constitute new matter and their entry is requested.

The Examiner rejected claims 26-30, 34-44, and 50 under 35 U.S.C. § 102(a) as being anticipated by Wei *et al.* (*Circulation* 99:3165-71 (1999)). Without acceding to the rejection, Applicants have amended claims 26-28, 42, 43, and 50 to remove the recitation of the G5349A (E1784K) mutation. Withdrawal of this rejection is requested.

The Examiner rejected claims 27 and 37 under 35 U.S.C. § 102(b) as being anticipated by Gellens *et al.* (*Proc. Natl. Acad. Sci. USA* 89:554-8 (1992)). Without acceding to the rejection, Applicants have amended claims 27 and 37 to recite that the probe is specifically hybridizable to mutated *SCN5A* DNA and not to wild-type *SCN5A* DNA. Withdrawal of this rejection is requested.

The Examiner rejected claims 34-36 under 35 U.S.C. § 102(b) as being anticipated by Wang *et al.* (*Curr. Opin. Cardiol.* 12:310-20 (1997)). Without acceding to the rejection, Applicants have amended claim 34 to recite that the method for assessing a risk in a human subject for long QT syndrome comprises screening the subject for a mutation in *SCN5A* selected from D1114N, L1501V, delF1617, R1623L, and S1787N. Withdrawal of this rejection is requested.

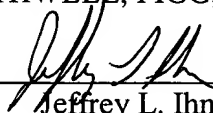
In view of the above amendments and remarks, in conjunction with the remarks made in the previous amendment, it is believed that the claims satisfy the requirements of the patent statutes and are patentable over the prior art. Reconsideration of the instant application and early

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notice of allowance are requested. The Examiner is invited to telephone the undersigned if it is deemed to expedite allowance of the application.

Respectfully submitted,  
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